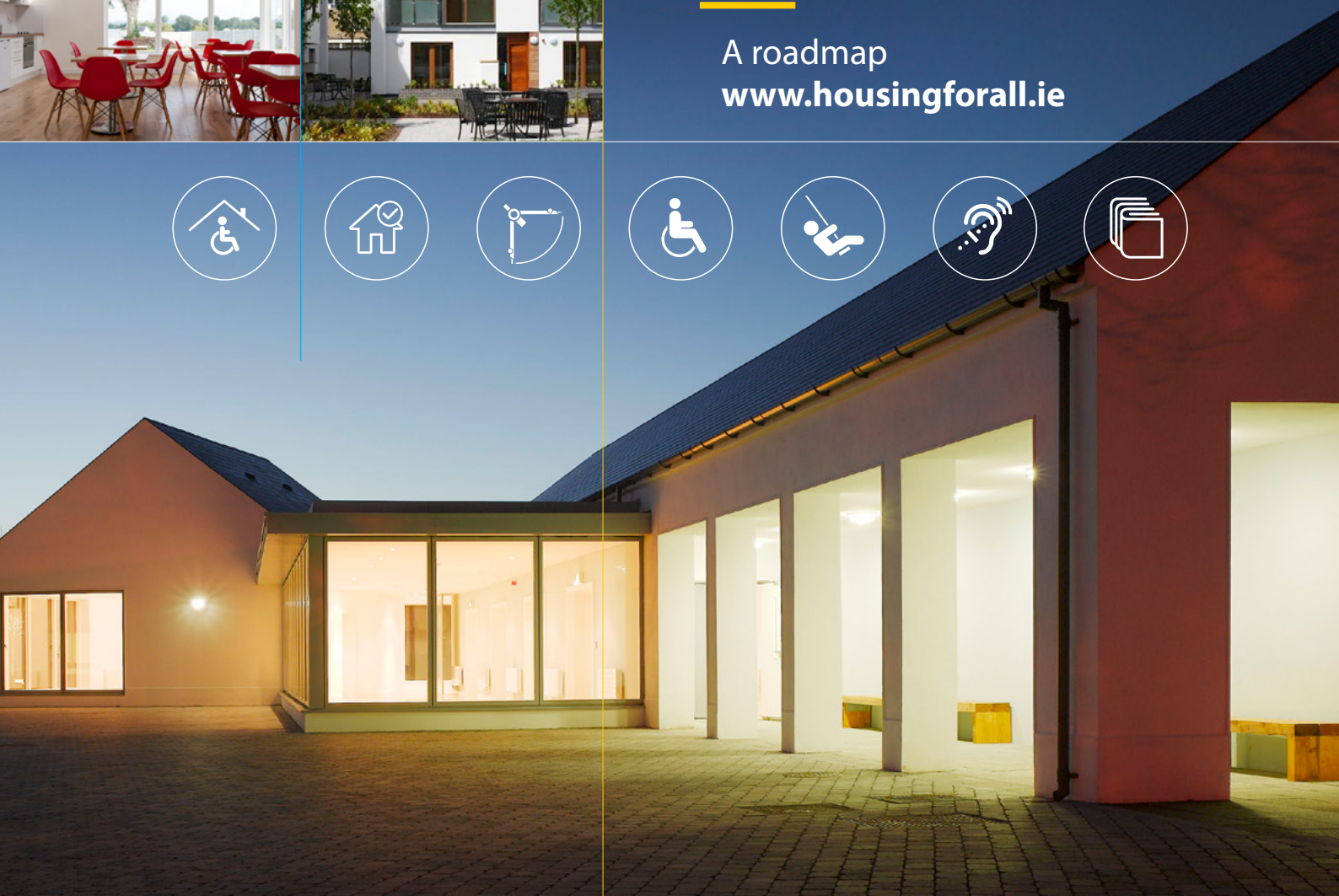




DESIGNING HOUSING TO MEET THE NEEDS OF ALL

A roadmap
www.housingforall.ie



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Introduction

The roadmap provides a pathway towards the information required to make informed decisions about better design, and to enable you to easily understand and access, in a structured way, the standards and guidance required to ensure that every person has a home that is appropriate to their needs. It is underpinned by the existing regulatory environment, compliance with which is mandatory, as it applies.

This roadmap supports the implementation of the National Housing Strategy for People with a Disability (NHSPWD) 2011 – 2016. The NHSPWD has been re-affirmed in the Rebuilding Ireland Action Plan for Housing and Homelessness and extended to 2020, to continue to progress its aims to ensure access for people with disabilities to the full range of housing options which will allow them to live independently in their own homes and communities, where appropriate.

The roadmap will be updated on a regular basis.



Why a roadmap?

Every housing design project is unique with its own context and requirements. Some homes are designed to meet the needs of a specific client whilst others are designed as part of larger developments where the final occupant is unknown. In addition, many existing homes are adapted and extended to take account of the changes in their owners' circumstances, as a family expands, as the occupants age, or to accommodate the particular requirements of one family member.

The ideas, concepts and guidance on how to design homes that can be best used and enjoyed by their occupants have developed over time and include a regulatory framework and wide range of terms, concepts and guidance that is both general and specifically aimed at individuals with specific needs. Understanding the various terms and concepts and charting your way through the regulations and guidance can be a daunting task.



The roadmap provides, from the perspective of a design practitioner, an overview and links to existing published legislation and guidance on designing to meet the needs of all including:

- Guidance on adapting an existing home or designing a new home for a person with a disability ([click here](#));
 - Overview of the Building Regulations as they apply to the access and use of residential dwellings ([click here](#));
 - Guidance on designing homes to Universal Design standards ([click here](#));
 - Available design guidance that addresses specific needs, including guidance on:
 - designing wheelchair accessible housing;
 - designing housing to suit older people;
 - designing for people with dementia;
 - designing for people who have a sensory impairment;
 - designing for people with a mental health condition;
 - designing for people who have autism;[\(click here\)](#)
 - Guidance on the design of the public realm ([click here](#));
 - Guidance on the use of assistive technology ([click here](#));
 - Commonly used design terms and concepts ([click here](#));
 - Overview of Government policy and legislation ([click here](#));
 - Links to external websites and publications that will provide you with detailed information, guidance and case studies ([click here](#)).
-



ROADMAP



Adapting
an existing
home or
designing a
new home



Regulations
(Statutory)



Universal
Design



Designing
for specific
circumstances



Design of
the Public
Realm



Assistive
Technology
within the
Home



Bibliography/
Links



1 Adapting an existing home or designing a new home for a person with a disability

1.1 GENERAL CONSIDERATIONS

The degree to which an existing dwelling will need to be adapted to allow a person to live well and independently will vary considerably, as will the degree to which a new dwelling will need to be purpose designed to meet a person's needs. When deciding on the most suitable accommodation for a person with a disability, the personal preferences and physical requirements of the individual should be fully considered.



EXISTING HOME

No building work required.



EXISTING HOME

With minor alterations.



EXISTING HOME

Adapted or extended.



NEW HOME

No building work required.



NEW HOME

Minor building works.



NEW HOME

Purpose designed to meet the needs of person with a disability.

ASK

Does the person's existing home meet their needs?

Would minor alterations enable them to continue to live in their existing home?

Would an adaptation or extension to a person's existing home help them to live independently?

If a person moves to a new home will it suit their needs?

Will a new home require minor alterations to meet a person's needs?

Does the person require a new purpose designed home to enable them to live independently?



Is there a need for an assessment by an occupational therapist, to ascertain the degree to which an existing or new dwelling will need to be adapted or modified to suit an individual's requirements?

CONSIDER

The individual's personal preferences and their existing and long-term requirements.

Because a person has a disability it does not necessarily mean that the home they are living in cannot meet their needs or that they need to move into a home that has been designed specifically for a person with a disability. For some people with disabilities their existing home adequately meets their needs, for others, minor, well considered modifications undertaken in consultation with the occupant may be all that is required to significantly improve their quality of life and to allow that person to live independently within their existing, or in a new, home.

For others, adaptations or extensions will be required to, for example, provide wheelchair access throughout the ground floor by widening doors and/or hallways, or to add a ground floor level accessible shower room or larger bedroom. In some cases, depending on the type of property the person lives in and the nature of their disability, a person may need to move to more suitable accommodation, which may or may not have been designed to suit a person with a disability, or that may need to be adapted to suit their needs.

When a person experiences a disability, it can be temporary (such as breaking a leg or following a hip replacement) or it can be permanent. The disability may or may not be progressive. Disabilities can be present at any age; however, the incidence of disability increases with age when mobility and function can often naturally change and sometimes dis-improve.

When choosing the most suitable and cost-effective housing option, long-term, as well as short-term, requirements should be considered.



1.2 PLANNING A HOME ADAPTATION

Minor interventions to a dwelling may be carried out by the person themselves or their family or, in the case of social housing, through the local authority or in collaboration with an Approved Housing Body (AHB) where an AHB is the landlord. Where the work is more substantial, involving an architect and occupational therapist in the process, at as early a stage as possible, is recommended.

An assessment by an occupational therapist will identify with the occupant their specific housing design requirements and thereafter, the occupant, occupational therapist, architect, quantity surveyor and any other members of the design team, can work together throughout the design process to determine the most suitable and cost-effective design.

Grant assistance may be available from the local council in carrying out home adaptations; where grant assistance is being sought, work should not start until any grant application has been processed and approved.

1.3 PLANNING A NEW HOME FOR A PERSON WITH A DISABILITY

For a new home for a person with a disability, which may form part of a larger development, the project team should, if possible, agree “pre-planning” with as many stakeholders as possible, the type of dwelling (apartment, duplex or house), the size of the dwelling, the best location for the dwelling, any specific internal and external works that may be required, and any additional construction costs.

For a social housing project designed to meet the needs of a person with a disability, an up-to-date occupational therapist’s report will be required. If a person has a condition that may progress, causing their housing design requirement to change into the future, this should be taken into account.

Ideally, the person who is to live in a particular dwelling will be known when the dwelling is being designed.

Where the future occupant has not been identified, the dwelling should be designed to accommodate their anticipated needs, based on a generic design and in such a way as to ensure that the person's specific requirements, once they are identified, have minimal impact on the building contract and programme.

Occasions may arise where it is best to omit works from the main building contract and have them carried out at a later stage, when the requirements of the occupant are known. The best way of contractually managing this should be agreed by the design/project team.

If the future occupant is unknown, details that have minimal cost and programme impact, such as whether the bathroom is designed to suit someone who is right or left handed, or the exact height of a kitchen worktop, can be agreed at construction stage.

Generally, fittings such as furniture, curtains and white goods, which may not form part of the building contract, may be agreed with the occupant at any time prior to the dwelling being occupied.

1.4 HOUSING MODELS - LINKS

The Irish Wheelchair Association, IWA, provides advice and guidance on the various housing options available to people with disabilities:

<http://www.iwa.ie/services/housing>.

The [Housing LIN](#) (UK) website provides a series of papers on accessible new and existing accommodation for people with disabilities.

1.5 ENGAGING A DESIGN TEAM

Under the Regulations governing safety, health and welfare at work, homeowners, including local authorities and Approved Housing Bodies, are obliged to ensure that construction work is carried out by competent people. [A guide for homeowners \(pdf\)](#) and some [Frequently Asked Questions](#), are available on the website of the [Health and Safety Authority](#).

The Royal Institute of Architects of Ireland, RIAI, <https://www.riai.ie/> provides advice and guidance on engaging and working with an architect. An architect will help set a viable brief and budget, guide the planning process, obtain quotes for the work, manage consultants such as surveyors and engineers, monitor the budget and administer the construction contract.

The Society of Chartered Surveyors Ireland, SCSi, <https://www.scsi.ie/> provides advice and guidance on construction, land and property and will provide help in finding a surveyor.

The Association of Occupational Therapists of Ireland, AOTI, <https://www.aoti.ie/>, provides information on the role of an occupational therapist and advice on accessing an occupational therapist in both the public and private sector.



1.6 HOUSING ADAPTATION GRANTS

There are a number of grants and schemes available to assist older people who wish to remain in their home.

The [Housing Adaptation Grant for People with a Disability](#) scheme provides grant aid to applicants to assist in the carrying out of works that are reasonably necessary for the purposes of rendering a house more suitable for the accommodation needs of a person with a disability. The scheme is administered by [local authorities](#).

The [Scheme of Housing Aid for Older People](#) is available to assist older people to have necessary repairs or improvements carried out to their homes.

The [Mobility Aids Grant Scheme](#) is available to fast track grant aid to cover a basic suite of works to address mobility problems, primarily, but not exclusively, associated with ageing.

1.7 PROCUREMENT

Guidance on various aspects of public procurement, including guidelines on national and EU procedures, is available from the office of government procurement: <http://www.etenders.gov.ie/generalprocguide.aspx>.

The website includes guidance on construction procurement: <http://constructionprocurement.gov.ie/>.

The [Office of Government Procurement](#) provides assistance on all aspects of public procurement.

The [Housing Agency Procurement Office](#) provides procurement and project management services to local authorities, Approved Housing Bodies (AHB) and the Department of Housing, Planning, and Local Government.

2 Building Regulations

The Building Regulations and Building Control Regulations
– Statutory Regulations, must be complied with, as they apply.

(LEGISLATIVE FRAMEWORK)

Universal Design

Wheelchair Accessible Housing
Housing for Older People
Housing for People with Sensory Disabilities
Design for Mental Health
Designing for Autism
Housing for People with Dementia

2.1 THE BUILDING REGULATIONS

The [Building Regulations](#) are a set of legal requirements for the design and construction of new buildings, extensions and material alterations to, and certain changes of use of, existing buildings and major renovations.

Building Regulations primarily provide for, in relation to buildings, the health, safety and welfare of people, conservation of fuel and energy, and access for people with disabilities. The minimum requirements that a building must achieve are set out in the **Second Schedule of the Building Regulations**. These requirements are set out in 12 parts (classified as Parts A to M). Each part of the Building Regulations is accompanied by a **Technical Guidance Document** indicating how the requirements of that part can be achieved in practice.

The primary responsibility for compliance with the requirements of the Building Regulations rests with the designers, builders and owners of buildings. Interpretation of the legislation is, ultimately, a matter for the Courts and implementation of the Building Control system is a matter for the local Building Control Authority.

2.2 PART M (2010) OF THE BUILDING REGULATIONS – ACCESS AND USE



Part M (2010) of the Building Regulations requires that adequate provision be made for people to access and use a building, its facilities and its environs. [Technical Guidance Part M](#) provides guidance that will, prima facie, indicate compliance with Part M.

To satisfy the requirements of Part M, all buildings should be designed and constructed so that:

- a) people can safely and independently approach, gain access and use a building, its facilities and its environs, and
- b) elements of the building do not constitute an undue hazard for people, especially for people with vision, hearing or mobility impairments.

Technical Guidance Document M 2010 is divided into three sections. The following sections apply to dwellings:

SECTION 1

sets out the minimum level of provision for the common areas of apartment buildings and their environs, and applies to new and existing buildings.

SECTION 2

provides additional guidance on the common areas of existing apartment blocks and their environs where it is not practicable to achieve the provisions set out in Section 1, and should be read in conjunction with Section 1.

SECTION 3

applies to dwellings and their environs. This includes individual dwelling houses and individual apartments. It does not apply to the common areas of apartment blocks. The guidance in Section 3 also applies to the common areas of duplex buildings.

M4 of Part M (2010) states that:

"The Requirements of Part M do not apply to works in connection with extensions to and the material alterations of existing dwellings, provided that such works do not create a new dwelling."



Main bedroom lights



Whereas compliance with the Building Regulations (including Part M) is mandatory for new buildings, certain parts of the Regulations also apply to existing buildings where a material change of use takes place. Otherwise, Building Regulations do not apply to buildings constructed prior to 1 June, 1992. If in doubt as to whether the Building Regulations apply you should obtain advice from an architect or from the building control section of your local authority.

All new dwellings must be designed to comply with the Building Regulations as they apply, including Part M, Access and Use.

The Building Control Regulations apply generally to new buildings and to existing buildings which undergo an extension, a material alteration or a material change of use.

2.3 THE BUILDING CONTROL REGULATIONS

The [Building Control Regulations](#) require owners, builders, and registered construction professionals to demonstrate through the Statutory Register of Building Control Activity that the works or building concerned have been designed and constructed in compliance with Building Regulations.

The Building Control Act 2007 established Disability Access Certificates with significant financial and other sanctions for non-compliance with Part M of the Building Regulations.

A DISABLED ACCESS CERTIFICATE

(DAC) is a certificate granted by a Building Control Authority which certifies compliance of the design of certain works such as new buildings (except dwelling houses), some extensions to, and some material alterations to buildings (except dwelling houses) with the requirements of Part M of the Building Regulations. Since 2010, a DAC is generally required for works which require a Fire Safety Certificate. Although a DAC is not required for some dwellings, they must still comply with the requirements of Part M, as it applies. A DAC is generally required for apartments, including the common areas of apartments.

The [Building Control \(Amendment\) Regulations 2014](#) (BCAR) ensure that design and construction receive statutory certification from registered construction professionals and builders, that compliance documentation is lodged, that mandatory inspections are carried out during construction and validation, and that certificates are registered.

On completion of the building or works, a certificate of compliance is jointly signed by the builder and the assigned certifier.

REFERENCES AND WEBSITES



British Standards Authority, (2018). *BS 8300- Parts 1&2:2018,. Design of an accessible and inclusive built environment.* Part 1 deals with designing accessible and inclusive external environments and Part 2 provide a definitive source of recommendations on the inclusive and accessible design of buildings. The standards are available from the bsi shop.

Compliance with BS 8300 does not infer compliance with Irish Building Regulations. There are many incidences whereby TGD M 2010 provides a superior level of performance than the BS 8300 series e.g. wheelchair turning circles in Accessible WCs.

Any reference to a technical specification in TGD M is a reference to so much of the specification as is relevant in the context in which it arises.

Technical specifications such as BS 8300 may also address other aspects not covered by the Regulations.

The current reference in TGD M is to BS 8300:2009 Although a reference to a technical specification is to the latest edition (including any amendments, supplements or addenda) current at the date of publication of a TGD, if the new version of the technical specification is subsequently revised or updated by the issuing body, the new version may be used as a source of guidance **provided that it continues to address the relevant requirements of the Regulations.**



Department of Housing, Planning and Local Government, (2010) (online). *Technical Guidance Document M Access and Use.* Available at: <https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/DevelopmentandHousing/BuildingStandards/FileDownload,24773,en.pdf> (Accessed August 2018).



Department of Housing, Planning and Local Government, (2007) (online). *The Building Control Act. (2007).* Available at: <http://www.irishstatutebook.ie/eli/2007/act/21/enacted/en/html> (Accessed August 2018).



3 Universal Design

While acknowledging that it sets out the minimum level of provision for compliance with the Part M Building Regulations, the Technical Guidance Document for Part M also states that:

‘those involved in the design and construction of buildings should also have regard to the design philosophy of Universal Design and consider making additional provisions where practicable and appropriate.’

Universal Design requires that all environments can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size, ability or disability.

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size, ability or disability.



An environment (or any building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. This is not a special requirement, for the benefit of only a minority of the population. It is a fundamental condition of good design. If an environment is accessible, usable, convenient and a pleasure to use, everyone benefits.

By considering the diverse needs and abilities of all throughout the design process, Universal Design creates products, services and environments that meet peoples' needs. Simply put, Universal Design is good design.





The environment refers not only to the home, it also includes public places in the built environment such as, buildings, streets or spaces that the public have access to; products and services provided in those places; and systems that are available, including information and communications technology (ICT).

Adopting a Universal Design approach improves the quality of the environment for all users, whether they be parents with young children or older people who wish to continue to live an independent life in their own home as they age, or the person with a disability who wishes to have a home adapted to suit their needs.

The Irish Centre for Excellence in Universal Design ([CEUD](#)) was established in 2007 under the Disability Act 2005 and is dedicated to the principle of Universal Access, enabling people in Ireland to participate in a society that takes account of human difference and to interact with their environment to the best of their ability.

The CEUD is part of the National Disability Authority in Ireland (NDA). The CEUD aims to support the achievement of excellence in Universal Design in Ireland. This includes contributing to the development and promotion of standards, working with the relevant bodies to ensure Universal Design is built into training and education for the appropriate professions, and promoting awareness and understanding of Universal Design in Ireland.

The Seven Principles of Universal Design

PRINCIPLE ONE

Equitable Use

PRINCIPLE FIVE

Tolerance for Error

PRINCIPLE TWO

Flexibility in Use

PRINCIPLE SIX

Low Physical Effort

PRINCIPLE THREE

Simple and Intuitive

PRINCIPLE SEVEN

Size and Space for Approach and Use

PRINCIPLE FOUR

Perceptible Information





**3 Bedroom 5 Person
Semi-Detached House
Universal Design
Layout-Indicative Floor
Plan Sample**

Source: Centre for Excellence in Universal Design, National Disability Authority, Universal Guidelines for Homes in Ireland, 2015.

THE BENEFITS OF UNIVERSAL DESIGN HOMES

A Universal Design (UD) Home can adapt and change with us by factoring in at the outset key design features that benefit the quality of life of everyone in the home. The application of Universal Design thinking to homes recognises differences and accommodates them through the integration at the outset of the design and construction stages of:

- Flexibility and ease of adaptability to meet people's changing needs over time in a cost effective way;
- Sustainable design to improve comfort and energy efficiency; and
- Smart technologies to enable ease of living independently for longer.

Living in a UD Home helps to avoid the need for re-location or costly building works as needs change over time. Integration of smart infrastructure and energy efficient systems at the outset of home design avoids costly re-fits and also benefits everyone in terms of comfort, efficiency and quality of services.

It is not about a 'one-size-fits-all' model – the UD Home environment enables the widest possible number of people to participate at home, in society, and to live independently. For a housing provider, builder or developer, a UD Home offers more for the widest range of potential residents.

UD Homes are about good design, efficiency and a broader market need.

REFERENCES AND WEBSITES



The Built Environment section of the CEUD website includes a section dedicated to designing housing to Universal Design standards. Access to the following CEUD publications is available on the CEUD website: <http://universaldesign.ie/>.




Centre for Excellence in Universal Design, National Disability Authority, (2012) (online). *Buildings for Everyone: A Universal Design Approach*. Available at <http://universaldesign.ie/Built-Environment/Building-for-Everyone/>. (Accessed August 2018). This series of 10 booklets provides comprehensive best practice guidance on how to design, build and manage buildings and spaces so that they can be readily accessed and used by everyone, regardless of age, size, ability or disability.


Section A1 of each booklet provides a definition of Universal Design


Section A2 covers Human Abilities and Design


Section A3 Further Reading:


- National and International standards and codes of practice and
- National and International Reference Documents.


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Centre for Excellence in Universal Design, National Disability Authority, (2015) (online). *Universal Guidelines for Homes in Ireland.* Available at <http://universaldesign.ie/Built-Environment/Housing/>. (Accessed August 2018). These guidelines provide a framework for designers to apply the principles of Universal Design to new homes through incremental steps described as UD Homes and UD + and ++ Homes. Appendix B pages 244- 248 provides an extensive bibliography for designing Universal Design homes and lists some useful websites for reference.
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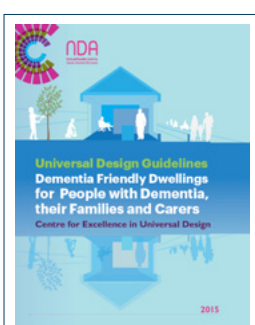
Department of Children and Youth Affairs, Centre for Excellence in Universal Design, Early childhood Ireland, TrinityHaus, Mary Immaculate College, (2019). *Universal Design guidelines for Early learning and Healthcare Settings.*
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Grey, T., Pierce, M., Cahill, S. and Dyer, M. (2015) (online). *Universal Design Guidelines Dementia Friendly Dwellings for People with Dementia, their Families and Carers.* Centre for Excellence in Universal Design, National Disability Authority. Available at: <http://universaldesign.ie/Web-Content-/UD-DFD-Guidelines-Full-Document-non-acc-June-15.pdf>. (Accessed August 2018).
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Grey, T., Siddal, E. and O'Shea, E. (2012) (online). *Shared Space, Shared Surfaces and Home Zones from a Universal Design Approach for the Urban Environment in Ireland, National Disability Authority.* TrinityHaus. Explores contemporary national and international practices and thinking on Shared Spaces, Shared Surfaces and Home Zones and to investigate these concepts from a Universal Design approach in the Irish Urban environment, References pages 179-184. Available at: <http://universaldesign.ie/Built-Environment/Shared-Space/Shared-Space-Full-Report.pdf> (Accessed August 2018).
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Irish Wheelchair Association, (2014) (online). *Best Practice Access Guidelines, Designing Accessible Environments.* 3rd Edition. Available at: <https://www.iwa.ie/downloads/about/iwa-access-guidelines.pdf> (Accessed August 2018). Provides guidance on designing the built environment, including housing, for wheelchair users and individuals with limited mobility.
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Sport Eireann, Irish Wheelchair Association (2019), The Great Outdoors - A guide for Accessibility in conjunction with Sport Ireland.



KEY ORGANISATIONS

National Disability Authority (NDA)

Centre for Excellence in Universal Design (CEUD)

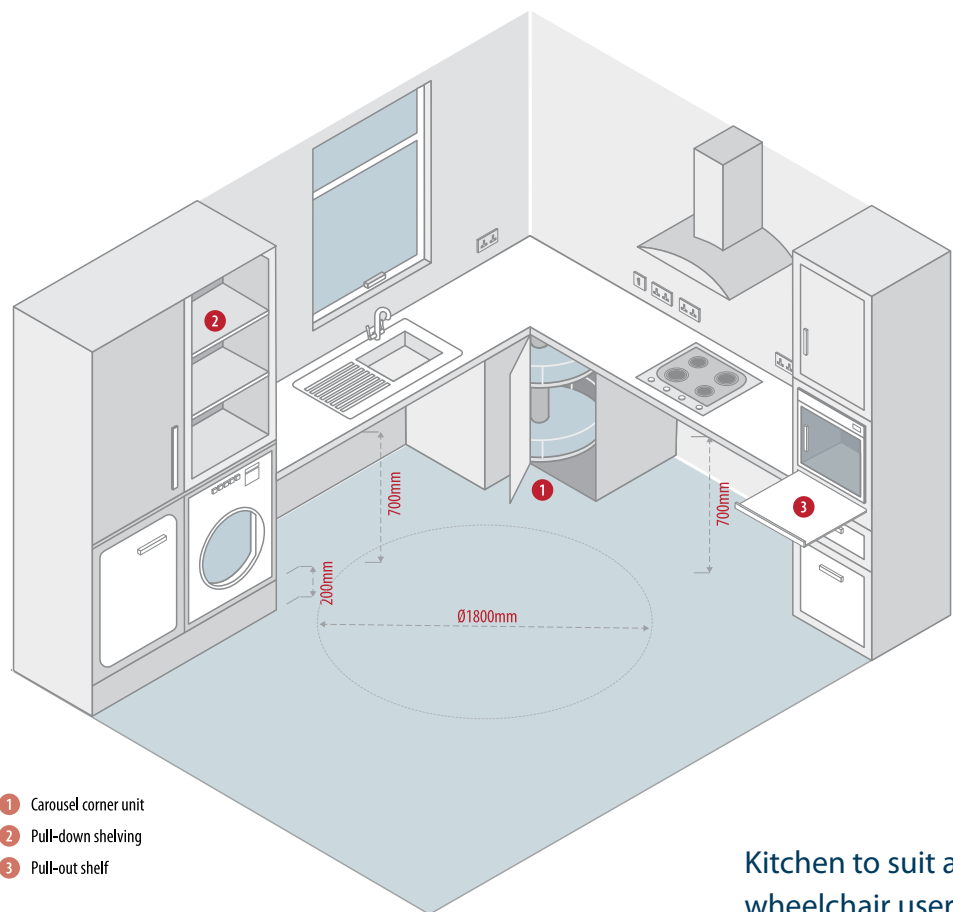
4 Designing for specific circumstances

In some circumstances expanding the Universal Design approach will be required to encompass the requirements of particular individuals or groups. Such circumstances arise where individuals have specific design requirements due to their having a disability whereby the design of the home environment needs to be tailored to meet their requirements. These circumstances may arise where a person has:

- a) Blindness or a severe vision impairment;
- b) Deafness or a severe hearing impairment;
- c) An intellectual disability;
- d) A cognitive impairment;
- e) A difficulty with basic physical activities, such as walking;
- f) A psychological or emotional condition;
- g) A difficulty with pain, breathing, or any other chronic illness or condition;
- h) Decline in mobility, dexterity, stamina, strength, hearing, sight or memory that can be associated with age.¹

Guidance that is aimed at providing an understanding of, and addressing, the specific requirements an individual with a particular condition may have, is therefore included in this roadmap.

¹ See also extract from European Ref: CEN/CENELEC Guide 6 included in [Buildings for Everyone](#), Section 7, A2 pages 130 – 142.



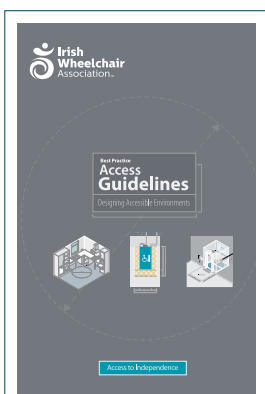
Kitchen to suit a wheelchair user

Source: Lifetime Adaptable Housing "Irish Wheelchair Association Best Practice Access Guidelines" edition 3 2014

4.1 WHEELCHAIR ACCESSIBLE HOUSING

Whereas the Building Regulations require that all new dwellings are accessible by a person who uses a wheelchair, they do not require the dwelling to be fully accessible for a wheelchair user. The [Irish Wheelchair Association](#) (IWA) advocates for the needs of people with disabilities and provides services and support to its members.

[Irish Wheelchair Association Best Practice Access Guidelines Edition 3, 2014](#), includes guidance on designing wheelchair accessible housing and lifetime adaptable housing. Wheelchair accessible houses are purpose-designed considering the specific space and access requirements of a person using a wheelchair.

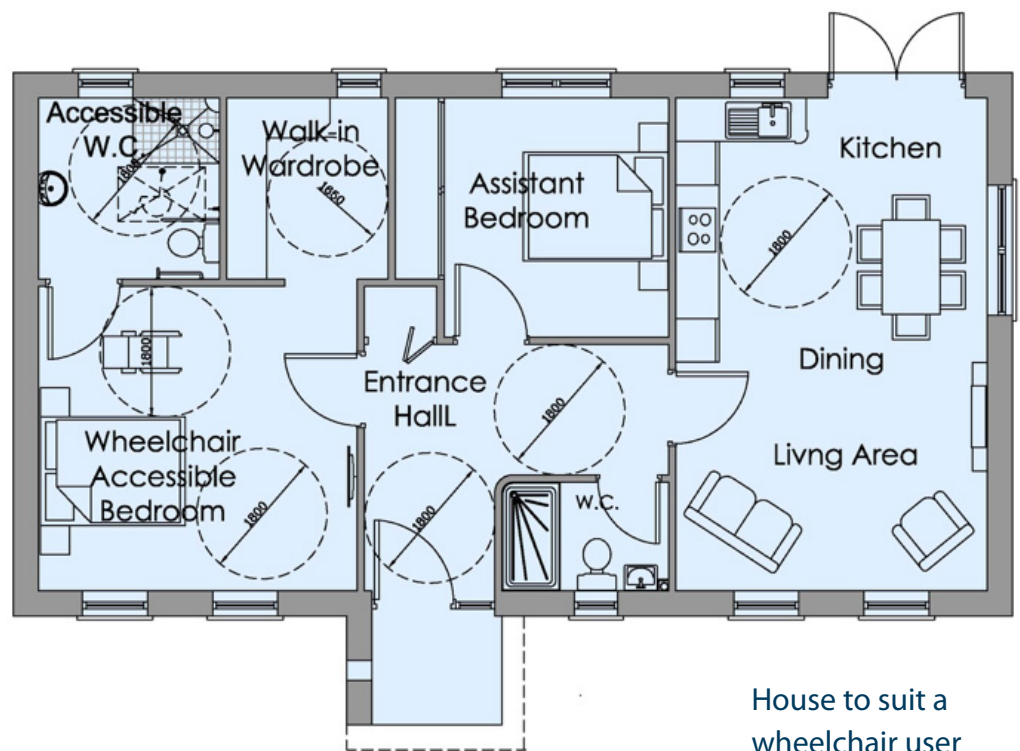


The Irish Wheelchair Association also provides a design consultancy service, using its Best Practice Access Guidelines as a reference.

In a similar design approach to Universal Design (UD), the Irish Wheelchair Association (IWA) recognises the desirability of future proofing both general home design and any purpose designed wheelchair accessible home. This is to ensure that any home can accommodate changing requirements including, for a wheelchair user, the need to accommodate a carer or PA (personal assistant), as the person who is the wheelchair user ages or their condition dis-improves.


The guidance for Lifetime Adaptable Housing as set out by the IWA, similar to UD, is intended to provide guidance on designing homes that can be responsive to the needs of all occupants over their lifetimes, and including some but not all wheelchair users. Informed by UD and the UK Lifetimes Homes Standards, IWA sets out 14 Lifetime Adaptable Housing design criteria.


Universal Design Standards will accommodate a person who has an age-related mobility impairment or is an occasional wheelchair user who is mainly using a wheelchair within the external rather than the home environment. However, where a person is a full-time wheelchair user, within the home & within the external environment, the guidance provided by the Irish Wheelchair Association should be consulted and applied.





Source: Declan Clabby & Associates Architects

REFERENCES AND WEBSITES

-  **Habinteg.** *Wheelchair Housing Design Guide, 3rd edition.* Available through the Habinteg website: <https://www.habinteg.org.uk/whdg3>

-  **Irish Wheelchair Association, (2014) (online).** *Best Practice Access Guidelines, Designing Accessible Environments.* 3rd Edition. Available at: <https://www.iwa.ie/downloads/about/iwa-access-guidelines.pdf>. (Accessed August 2018). Provides guidance on designing the built environment, including housing, for wheelchair users and individuals with limited mobility.

-  **Irish Wheelchair Association. (online)** Available at: <https://www.iwa.ie/> (Accessed August 2018). Advocates for the needs of people with physical disabilities and provides services and support.

-  **Mayor of London, (2007).** *Wheelchair accessible housing, Designing homes that can be easily adapted for residents who are wheelchair users.* Best Practice Guide, GLA. Available at: https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/archives/bpg-wheelchair-accessible-housing.pdf (Accessed August 2018).



4.2 HOUSING FOR OLDER PEOPLE

Most older people live in general needs housing and, as they age, wish to continue living independently in their existing neighbourhoods. The benefits that Universal Design bring are therefore particularly significant when designing housing for older people, or housing that a younger person will be able to continue living in as they age. Homes designed to Universal Design standards can be easily adapted to meet the evolving needs of most people and thereby allow people to continue to live independent lives in their own homes and neighbourhoods as they age.










*'If independence is the what,
Universal Design is the how.'*


Guidance on designing to Universal Design standards is therefore the starting point and, for many, will ensure that, with only very minor adaptations, they will be able to continue living in their own homes and communities for as long as they wish.


In addition to providing guidance on designing homes that will help older people generally, the roadmap includes access to detailed guidance on particular conditions whose incidence increases with age, such as sight or hearing loss and dementia.





REFERENCES AND WEBSITES


-  The webpage contain a comprehensive record of design-related resources relating to age in the UK: <https://www.housinglin.org.uk/>
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4.3 DESIGNING FOR PEOPLE WITH DEMENTIA

Appropriate design can help people with dementia to remain living at home and in their community independently and safely for as long as possible and also supports family members and carers.

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4.4 DESIGNING FOR PEOPLE WITH SENSORY DISABILITIES



The design of homes can be modified to enable people, including older people, with sensory disabilities, such as sight loss or hearing impairment, to lead better, more independent lives.

The following guides provide an understanding of the impact sight and hearing loss have on people's lives and include good practice guidance for architects, designers, housing professionals and others in the development of inclusive environments.

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4.5 DESIGNING FOR MENTAL HEALTH



Understanding what the person with an enduring mental health difficulty is experiencing and the way in which the built environment impacts on their life is the key to identifying the types of interventions that will help to make that person's home environment work well for them.

REFERENCES AND WEBSITES



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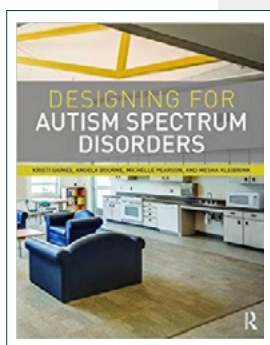


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4.6 DESIGN FOR AUTISM



Whereas most research on autism has focussed on children and younger people, it is only recently that there has been growing concern of how to plan for individuals with autism spectrum disorder (ASD) or autism spectrum condition (ASC), after they have left school, and to consider how they might live outside the parental home. The following research based guides provide guidance on how to design homes, and other environments, that enhance the lives of people.



REFERENCES AND WEBSITES

➦ **APLUSnfp** is a charitable organization mandated to research and apply design strategies that better the lives of people living with cognitive differences like Autism, Alzheimers, and Aging related disabilities. Available at: www.architectureforautism.org. (Accessed August 2018).

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➦ **Brand, A. (online).** *Living in the Community, Housing Design for Adults with Autism.* Available at: https://www.rca.ac.uk/documents/390/Living_in_the_Community.pdf. (Accessed August 2018).

➦ **Fast Company.** *How to design for Autism.* Available at: <https://www.fast-company.com/3054103/how-to-design-for-autism>. (Accessed May 2019).

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5 Design of the public realm

It is not just homes, but also the neighbourhoods where people live that have a significant role in keeping people well and independent. The public realm needs to be secure, accessible, inclusive, connected and easy to understand and maintain, if it is to support independent living. To achieve this the development of sustainable neighbourhoods should be guided by considering people's diverse needs and abilities throughout the design process, which reflects the life-cycle approach. By doing this, environments that meet the needs of all can be achieved³.



³ The Sustainable Residential Development in Urban Areas Guidelines

Developing sustainable neighbourhoods should be guided by the principle of Universal Design. Universal Design is the design of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability. By considering people's diverse needs and abilities throughout the design process, which reflects the life-cycle approach, environments that meet the needs of all can be achieved. In this way, sustainable design and Universal Design are inextricably linked and sustainable design when incorporated from the early stage of planning integrated neighbourhoods, will reduce the need for costly and wasteful retrofits over the medium to long-term.

GUIDELINES FOR PLANNING AUTHORITIES ON SUSTAINABLE RESIDENTIAL DEVELOPMENTS IN URBAN AREAS (CITIES, TOWNS AND VILLAGES).



Source: Centre for
Excellence in Universal
Design, National Disability
Authority, Universal
Guidelines for Homes in
Ireland, 2015.



Source: Centre for
Excellence in Universal
Design, National Disability
Authority, Universal
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REFERENCES AND WEBSITES

The following guides, standards and reports provide information on designing the public realm in a way that ensures that it can be accessed and enjoyed by all:

-  **Buildings for Life, (online).** *Buildings for Life* is a UK based government-endorsed industry standard for well-designed homes and neighbourhoods that is intended to guide discussions about creating good places to live. The Build for Life Quality mark provides 12 key Built for Life standards against which places can be assessed and accredited. Available at: <https://www.designcouncil.org.uk/resources/guide/building-life-12-third-edition>. (Accessed August 2018).
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6 Assistive technology

Assistive Technology is a term used to refer to practical tools that can support functional needs of people who experience difficulties linked to disability or ageing.

The most widely used definition of Assistive Technology today is probably the definition of 'Assistive Products' used by the International Standards Organisation (ISO): Any product (including devices, equipment, instruments and software), especially produced or generally available, used by or for persons with disability: for participation; to protect, support, train, measure or substitute for body functions/structures and activities; or to prevent impairments, activity limitations or participation restrictions.

Examples of Assistive Technology in the home:

- Automated entrance/internal door/s.
- Automated control of devices in the home such as TV, heating, curtains.
- Intercoms between rooms.
- Video intercom at front door.
- Flashing devices, e.g. a doorbell, which alerts the deaf or hard of hearing person that there is someone at the door through a flashing light.
- TV Listening devices, which allow the person with hearing loss to adjust the TV volume independently and to eliminate background noise.
- Amplified telephones, which provide amplified and higher quality sound that assist some people with hearing loss to use the telephone.
- Vibrating pillow pads, which alert people while sleeping. This can include an alarm clock, doorbell or fire alarm.
- Stand-alone devices, such as memory aids and alarms.
- Linked sensors which can control devices such as shutting off the cooker.
- Devices which can communicate an early alarm to a remote support team, such as fire or flooding.

REFERENCES AND WEBSITES



Assistireland, (deaftech) (online). Assistireland can advise on making buildings and services accessible for Deaf and Hard of Hearing people in compliance with Part M of the Building Regulations, the Equal Status Act and the Disability Act. Independent Living Ireland is a non-profit social enterprise that provides technology devices to assist the elderly, disabled or those discharged from hospital that includes assessment, procurement and on-going management. Available at: <http://www.assistireland.ie/eng/>. (Accessed August 2018).



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National Disability Authority, (online). Irish National IT Accessibility Guidelines National Disability Authority guidelines for accessible products and services, including:

- Descriptions of high level accessibility goals and the difficulties faced by users
- Prioritised guidelines for each technology
- Motivation and justification for each guideline
- Guidance on design techniques and testing methods.

Available at: <http://universaldesign.ie/Technology-ICT/Irish-National-IT-Accessibility-Guidelines/>. (Accessed August 2018).

7 Appropriate Use of Terms



The [National Disability Authority](#) website notes the following:

When writing or speaking about people with disabilities, it is important to put the person first. Catch-all phrases such as 'the blind', 'the deaf' or 'the disabled', do not reflect the individuality, equality or dignity of people with disabilities.




Put the person first

The website provides examples of appropriate terms to use when describing, speaking or writing about people with disabilities and terms that are no longer in use.

Universal Design Guidelines for Home

Appendix C Terminology, pages 252-255 provides a list of commonly used design related terms.

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National Standards Authority of Ireland, (online). A standard is a document that sets out requirements for a specific item, material, component, system or service, or describes in detail a particular method or procedure. The NSAI is Ireland's National Standards body. A list of relevant standards and publications is provided at the back of Technical Guidance Document M Access and Use. Available at: <https://www.nsai.ie/> (Accessed August 2018).



8 Government policy and legislation


8.1 KEY POLICY AND LEGISLATION DOCUMENTS

<u>National Disability Inclusion Strategy 2017-2021</u>	Takes an all Government approach in setting out 114 actions that aim to support people with a disability to live the life they want to live. Alongside other actions, the Strategy commits to ongoing support in implementing the National Housing Strategy for People with a Disability and to developing design guidance to inform appropriate housing design for people with a disability.
<u>Disability Act 2005</u>	The Disability Act is designed to advance and underpin the participation of people with disabilities in society by supporting the provision of disability specific services and improving access to mainstream public services. It places significant obligations on public bodies to make buildings and services accessible to people with disabilities, provides for sectoral plans in key service areas, requires public bodies to take positive actions to employ people with disabilities and provides for the establishment of a Centre for Excellence in Universal Design. ⁴
<u>UN Convention on the Rights of Persons with Disabilities.</u>	The UN Convention on the Rights of Persons with Disabilities (also called the CRPD) provides the framework to promote, protect and ensure the rights of all people with disabilities and promotes equal rights in all areas of life. Ireland signed the CPRD in March 2007 and it was ratified by Government on 7 th March 2018.

⁴ <http://www.justice.ie/en/JELR/DisabilityAct05Guide.pdf/Files/DisabilityAct05Guide.pdf>

<u>National Housing Strategy for People with a Disability 2011-2016</u>	The National Housing Strategy for People with Disabilities (2011-2016) has been re-affirmed in the Rebuilding Ireland Action Plan For Housing and Homelessness and extended to 2020, to continue to progress its aims to ensure access for people with disabilities to the full range of housing options which will allow them live independently in their own homes and communities, where appropriate.
<u>The Building Control Act 2007</u>	Refer to section 2 of this roadmap.
<u>The Building Regulations, Technical Guidance Part M 2010</u>	Refer to section 2 of this roadmap.
<u>Code of Practice for Fire Safety in New and Existing Community Dwellings, October 2016.</u>	Includes guidance on Residential (Dwellings) Purpose group 1 (d) - community dwelling houses with a maximum of 8 bedrooms and an upper limit of six residents which would be used by a) Children, b) People with mental health issues, c) People with intellectual disability and d) People with physical disability.
<u>The City and the Disabled, Declaration, Barcelona, 1995</u>	Supports the rights of people with disabilities to participate as equal citizens and was endorsed by many local authorities with accompanying consultation procedures and implementation plans. To date, 101 councils have adopted the Declaration in Ireland.
<u>The Equal Status Act 2000</u>	Prohibits discrimination on nine specific grounds and requires service providers to provide reasonable accommodation to people with disabilities in the provision of goods and services.
<u>National Positive Ageing Strategy</u>	Is a commitment in the Programme for Government and was published in April 2013. The Strategy is a high-level document outlining Ireland's vision for ageing and older people and the national goals and objectives required to promote positive ageing. It is an over-arching cross-departmental policy that will be the blueprint for age related policy and service delivery across Government in the years ahead.

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9 Bibliography/ Links

9.1 NDA LIBRARY

The [NDA library](#) contains extensive collections of:

- disability research,
- disability policy,
- universal design, and related topics,
- disability archival material, and
- grey literature.

Access is available to the online [library catalogue](#) and, on Thursdays, the library is open to the general public, as a reference library.

9.2 GUIDANCE AND REPORTS

Age Friendly Ireland and the Centre for Excellence in Universal Design at the National Disability Authority, (2015) (online). *How Walkable is Your Town.* Available at: <http://universaldesign.ie/Web-Content/How-Walkable-is-Your-Town-Report.pdf>. (Accessed August 2018).

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